Sustainable Aquaculture Development in Canada



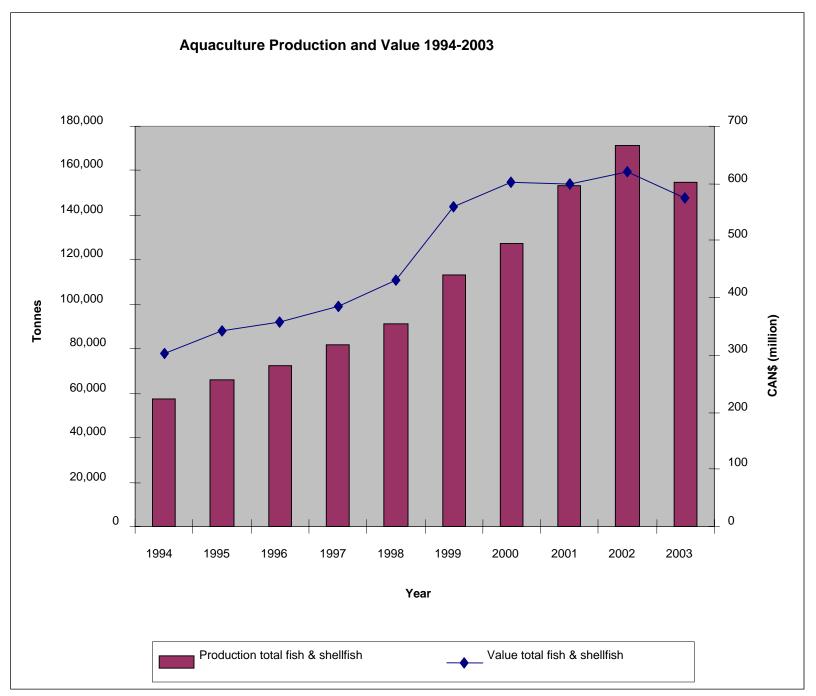


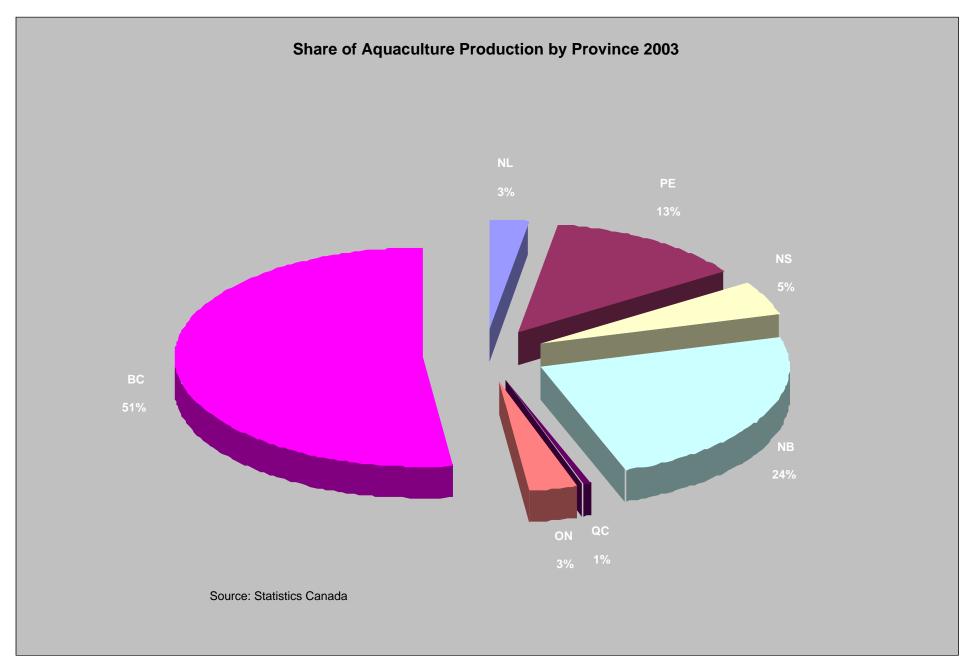
The Canadian Experience: Role of Aquaculture in Meeting Global Seafood Demand Seattle – June 20, 2005

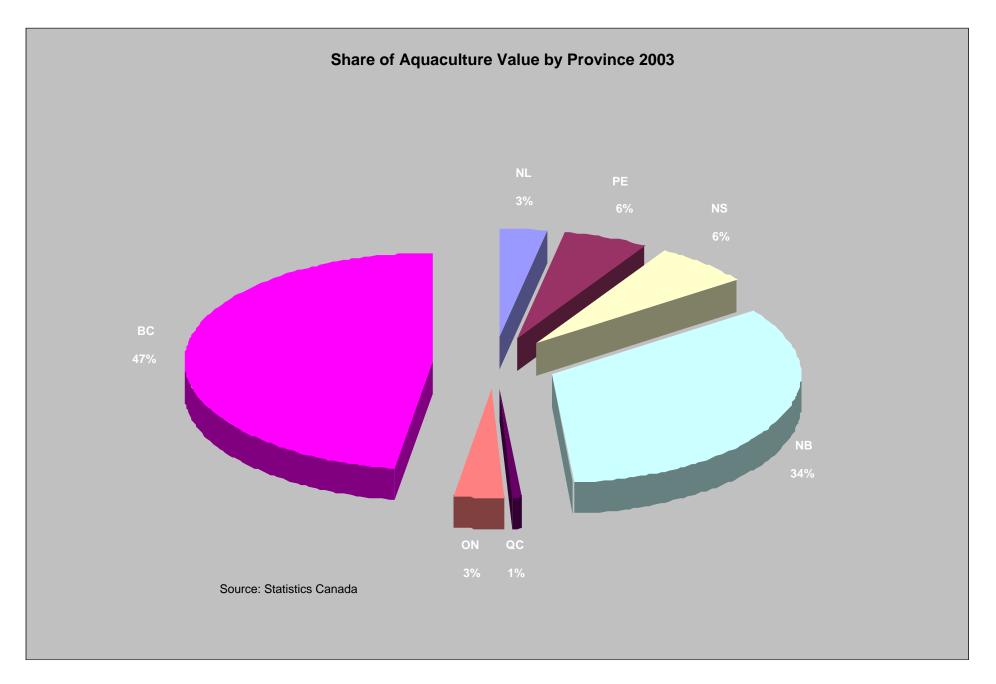
Presentation Synopsis

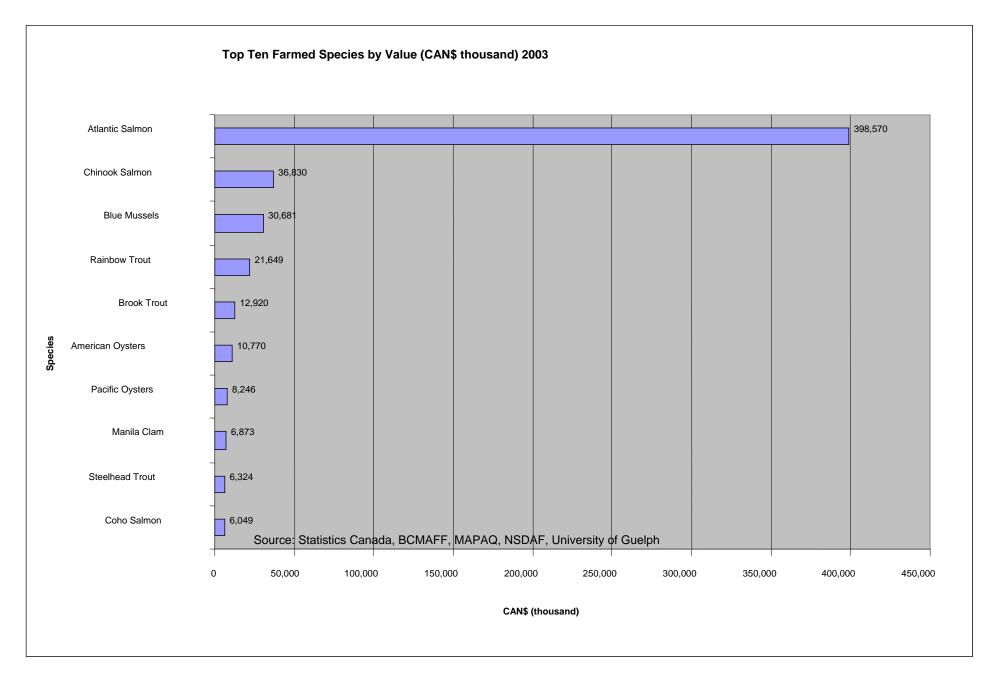
- Canadian Aquaculture some key figures
- National Policy principles
- Role of governments regulatory
- How we are organized harmonization
- Focus on British Columbia
 - First Nations engagement and interests
 - Regulatory changes, new requirements
- Lessons learned











Federal/Provincial Jurisdiction

FEDERAL

- DFO management of seacoast and inland fisheries
- Protection of fish and fish habitat
- Navigation
- International and inter-provincial trade

PROVINCIAL

- Private property
- Operations of business in this case aquaculture
- Access to provincial "public" lands
- Waste discharge

Aquaculture Regulatory Framework - Federal

Fisheries and Oceans Canada (DFO)

- Applies federal Fisheries Act (ss. 35 and 36) and Canadian Environmental Assessment Act (CEAA) to aquaculture
- Issues transfer permits under section 55/56 of federal Fisheries Act

Transport Canada (TC)

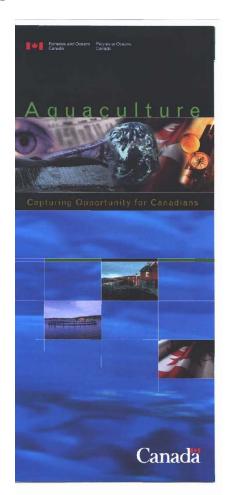
 Conducts navigational impact assessment pursuant to Navigable Waters Protection Act and CEAA assessment (if not triggered by federal Fisheries Act)

Canadian Food Inspection Agency (CFIA)

Inspects farmed product

Environment Canada (EC), DFO and CFIA

 Application of the Canadian Shellfish Sanitation Program (CSSP)



Aquaculture Regulatory Framework - Provincial

Land and Water British Columbia (LWBC) Inc.

 Grants tenure to Crown (public) land for the purpose of aquaculture

British Columbia Ministry of Agriculture, Food and Fisheries (MAFF)

Grants authority to conduct business of aquaculture.
 Monitors state of compliance with regulations on behalf of MAFF, MWLAP and LWBC

Ministry of Water Land and Air Protection (MWLAP)

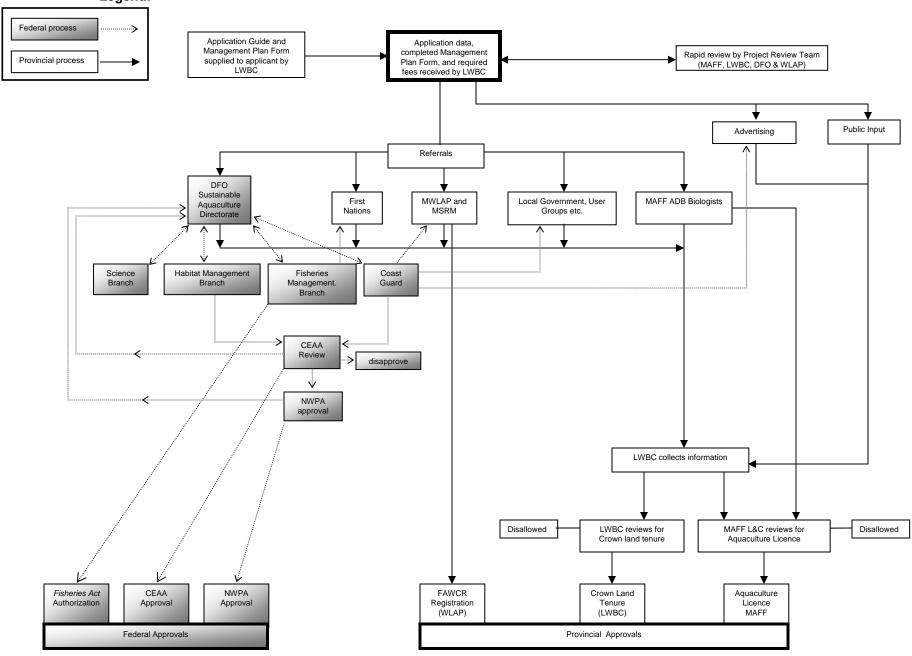
 Environmental monitoring of aquaculture operations and the administration of the Waste Management Act

Local Governments

Permissive or restrictive zoning bylaws

Federal-Provincial Approval Processes for New BC Fish Farms

Legend:



Federal (DFO) National Aquaculture Policy Framework

- Theme: Increased Public Confidence in the Sustainability of Aquaculture Development
 - Principle 1: commits to ecosystem-based and integrated management;
 - Principle 2: commits to transparency, decision-making based on science and risk management;
 - Principle 3: commits to effective communications with Canadians on aquaculture development;
 - Principle 4: commits to respect for Aboriginal rights and facilitation of participation by interested communities;

Federal (DFO) National Aquaculture Policy Framework

Theme: Increased Industry Competitiveness in Global Markets

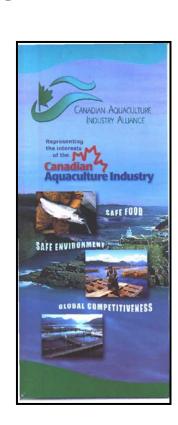
- Principle 5: affirms that aquaculture is a legitimate use of land, water and aquatic resources;
- Principle 6: affirms equity with other sectors;
- Principle 7: commits to partnerships for responsible aquaculture development;
- Principle 8: commits to a solutions-orientation to address development needs;
- Principle 9: commits to coordinated policy development, integrated regulatory frameworks and improved service delivery with provincial and territorial governments.

British Columbia

- Opportunity for development in coastal communities
- Development is to be driven by private sector initiative and capital – no subsidies
- Government sets standards and monitors compliance
- Define process for access to land
- Support environmental research

Federal/Provincial Coordination/Harmonization

- The Canadian Council of Fisheries and Aquaculture Ministers (CCFAM)
- Regional Processes and Agreements
 - Pacific Council of Fisheries and Aquaculture Ministers (PCFAM)
 - Memoranda of Understanding
 - Directors Aquaculture Committee (DAC)
- National Aquatic Animal Health Program
- National Code System for Aquaculture (CAIA)



BC Industry Profile

Finfish

- 132 marine licences
- 116 freshwater licences
- Production 76,300 mt (01-03)
- Wholesale Value \$330 M

Shellfish

- 491 licences
- Production 8,700 mt (01-03)
- Wholesale Value \$28.3 M



First Nations (FN) Involvement

- Share of workforce growing:
 - 20% of salmon farming
 - 10% of shellfish farming
 - 18% overall
 - Does not include processing, transport, marketing and industry suppliers (from 2004 SWOT Assessment)
- Kyuquot, Ahousaht and Kitasoo FN actively involved in salmon farming through joint ventures.
- Kitkatla FN has agreement for development on North Coast.
- Aboriginal Aquaculture Association



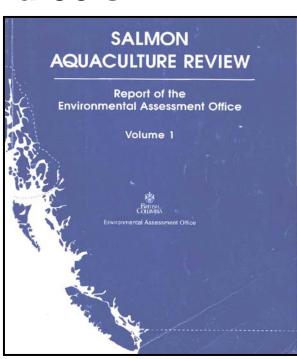


BC FARMED SALMON

- Canada is the 4th largest producer of farmed salmon in the world (after Norway, Chile and the United Kingdom)
- More than 65% of all Canadian farmed salmon is produced in B.C.
- 85% of B.C.'s farmed salmon is exported, mostly to the U.S. market
- Farmed salmon exceeds the wild salmon sector in harvest quantity and value

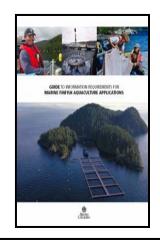
Salmon Aquaculture Review

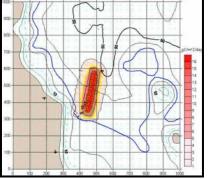
- Response to increasing concerns about environmental sustainability in mid-90's
- Major Issues:
 - Siting
 - Marine Mammals
 - Waste Management
 - Escapes
 - Fish health
- Forty-Nine recommendations
- Policy Response: Salmon Aquaculture Policy Framework



SAR Response

- New and consolidated siting guidelines
- Binding escape prevention and response plans
- New waste management regulations
- New fish health management program
- Compliance and Enforcement
- Research Aquaculture
 Environment Fund, Sustainable
 Aquaculture Chair







Pacific Salmon Forum

- Independent forum launched December, 2004
- To provide impartial information on the management of wild and farmed salmon resources, independent of government direction
- Chair Honourable John Fraser (former federal fisheries minister) and six representatives from communities, the fishery and First Nations
- Budget \$5 million over the next three years

Fish Health Management

 Comprehensive framework designed to improve monitoring and regulation of fish health and disease issues.

Three Components:

- Fish Health Working Committee
- Fish Health Management Plans
- Fish Health Auditing & Surveillance Program – including sea lice



Compliance and Enforcement

Compliance and enforcement program includes:

- Awareness, education, promotion and training activities;
- Promoting industry best practices;
- Developing co-operative partnerships and agreements with industry, First Nations, coastal stakeholders, and local communities;
- Conducting monitoring, inspections and audits;
- Investigating alleged violations; and,
- Public reporting on compliance status of salmon farms based on inspections.





Going Forward: Defining a New Relationship

- Proposed Federal/Provincial Aquaculture Framework Agreement
- Elements:
- Governance
 Environmental Stewardship
 - Marketing
 Food Safety and Traceability
 - ➤ Labeling and Branding → Business Risk Management
 - ➤ Aquatic Animal Health ➤ Infrastructure
 - Science Innovation and Commercialization

Lessons Learned - Canadians' Perceptions, Attitudes and Concerns about Aquaculture

- Canadians generally unaware about aquaculture there is an information gap
 - But, many people are hopeful and think Canada could be a world leader
 - People have positive views on potential for employment, viability as a food source and reducing pressure on wild fish
- The benefits of aquaculture are not self-evident negative media outweighs the many perceived benefits
- People's concerns must be addressed before they will accept the benefits
- People have clear expectations from government- strong leadership, tough regulations and enforcement
 - People want honest and balanced information
 - Safety concerns must be addressed first